Juniperus scopulorum/Oryzopsis micrantha Woodland

COMMON NAME	Rocky Mountain Juniper / Little-seed Mountain Ricegrass Woodland
SYNONYM	Rocky Mountain Juniper / Little-seed Ricegrass Woodland
PHYSIOGNOMIC CLASS	Woodland (II)
PHYSIOGNOMIC SUBCLASS	Evergreen Woodland (II.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar needle-leaved evergreen woodland (II.A.4)
PHYSIOGNOMIC SUBGROUP	Natural/Semi-natural (II.A.4.N)
FORMATION	Round-crowned temperate or subpolar needle-leaved evergreen woodland (II.A.4.N.a)
ALLIANCE	JUNIPERUS SCOPULORUM WOODLAND ALLIANCE

CLASSFICATION CONFIDENCE LEVEL 1

USFWS WETLAND SYSTEM Terrestrial

RANGE

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Rocky Mountain juniper / little-seed ricegrass woodlands are predominantly found on slopes in both the North and South Units. Such sites occur throughout the scoria hills and in the transition zones of the upland grassland and old river terrace regions. This association is also sometimes found at the upper reaches of north facing hardwood draws in close association with *Fraxinus pennsylvanica.*

Globally

This community is found in southeastern Montana, southwestern North Dakota, western South Dakota, eastern Wyoming, and western and central Nebraska.

ENVIRONMENTAL DESCRIPTION

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Slope and aspect appear to play major roles in the extent and development of these woodlands. The soils on such steep slopes tend to be poorly developed clay, clay loams, and scoria slopes (Girard 1985). This alliance is frequently used by native ungulates (bison, elk, and deer) for lounging. Well-worn trails are common on many sites. Stumps from historic logging were also quite common in many of these woodlands.

Globally

This community typically occurs on moderate to steep (16-70%) north-facing slopes, but can occur on a variety of aspects (Johnston 1987, Von Loh *et al*. 1999). The soils are poorly developed, shallow, loamy sands, sandy loams, and clay loams, sometimes with high gravel content. These woodlands are frequently associated with outcrops of sandstone (DeVelice *et al*. 1995) or scoria and clay slopes (Girard *et al*. 1989).

MOST ABUNDANT SPECIES

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Stratum	Species
Tree Canopy	*Juniperus scopulorum, Fraxinus pennsylvanica*
Short Shrub	*Prunus virginiana, Symphoricarpos occidentalis, Rhus trilobata*, *J. scopulorum*
Herbaceous	*Oryzopsis micrantha, Maianthemum stellatum, Elymus virginicus*

Globally

Stratum	Species
Tree canopy	*Juniperus scopulorum, Juniperus virginiana*
Short shrub	*Rhus trilobata, Symphoricarpos occidentalis*
Forb	*Campanula rotundifolia, Galium boreale, Maianthemum stellatum*
Graminoid	*Oryzopsis micrantha*

CHARACTERISTIC SPECIES

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Juniperus scopulorum, Oryzopsis micrantha

Globally

Juniperus scopulorum, Juniperus virginiana, Oryzopsis micrantha

VEGETATION DESCRIPTION

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This community is densely wooded with interlocking canopies of *Juniperus scopulorum*. Mean foliar cover of *J. scopulorum* is about 41%. *Fraxinus pennsylvanica* is a common , but low density associate, especially on the upper reaches of upland draws. *Prunus virginiana* is a frequent understory shrub, often occurring in dense patches. *Oryzopsis micrantha* (= *Piptatherum micranthum*) is the major characteristic herbaceous species. *Smilacina stellata* (= *Maianthemum stellatum*) and a moss (probably *Thuidium abietinum*, Girard 1985) are frequent herbaceous associates.

Globally

This woodland community is dominated by small *Juniperus scopulorum* trees through most of its range, and is replaced by *J. virginiana* and introgressant hybrids in the eastern portion of its range in Nebraska (Kaul *et al*. 1983). Some stands contain *Fraxinus pennsylvanica*. Most of these trees are 10-20 cm dbh and 4-6 meters tall (Nelson 1961, Hansen *et al*. 1984). Some trees can be up to 30-40 cm dbh. The basal area has been reported at 22-29 m^2/ha in North Dakota (Hansen *et al.* 1984) and up to 22-41 m^2/ha in southeastern Montana and northwestern South Dakota (Hansen and Hoffman 1988). Tree canopy is moderate to dense. In North Dakota, Girard *et al*. (1989) measured densities of 975 trees/ha. Where the canopy is dense the shrub and herbaceous strata are poorly developed. Where the canopy is less full, shrubs and herbaceous species are more abundant. On 7 stands in southwest North Dakota mosses and lichens covered 72% of the ground surface, shrubs covered 17.4%; graminoids - 69.1%; forbs - 9.4% (Hansen *et al*. 1984). Three stands in southeastern Montana had less coverage in each strata (Hansen and Hoffman 1988). Among the shrubs that may be found in this community are *Juniperus communis*, *J. horizontalis*, small *J. scopulorum or J. virginiana*, *Mahonia repens*, *Pentaphylloides floribunda*, *Prunus virginiana, Rhus trilobata, Ribes aureum, R. cereum, Rosa woodsii*, *Symphoricarpos albus, and S. occidentalis*. Typical herbaceous species include *Anemone patens, Antennaria microphylla, Campanula rotundifolia*, *Carex inops* ssp. *heliophila*, *Chenopodium fremontii*, *Elymus lanceolatus, E. trachycaulus, Galium boreale*, *Geum triflorum, Koeleria macrantha*, *Oryzopsis micrantha*, *Maianthemum stellatum, Parietaria pensylvanica*, and *Taraxacum officinale*. *Acer negundo* and *Fraxinus pennsylvanica* saplings are sometimes found in depressions where soil and moisture accumulate.

OTHER NOTEWORTHY SPECIES

CONSERVATION RANK G3. A number of sites have been impacted by cutting for fenceposts or railroad ties. Fire suppression may increase the extent of the community within its range.

DATABASE CODE CEGL000747

SIMILAR ASSOCIATIONS

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